

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Jarma Ilmari Maula He

Jarmo Ilmari Maula, Hannu Leskinen, Teemu Lang, Pekka Kuosmanen, Kari Härkönen, and Bradley J. Aitchison

Confirmation No. 9277

Application No. 10/609,339

Filed: June 26, 2003

For: DIAPHRAGM VALVE WITH

RELIABILITY ENHANCEMENTS FOR ATOMIC LAYER DEPOSITION

Group Art Unit:

Examiner:

1.

Date: November 17, 2003

## **INFORMATION DISCLOSURE STATEMENT**

Pursuant to the duty of disclosure, documents listed on the accompanying Form

## TO THE COMMISSIONER FOR PATENTS:

	PTO-1449 (or equivalent) are presented for the Examiner's consideration.								
	$\boxtimes$	Copies of listed documents are enclosed. (37 CFR § 1.98(a))							
		Copies of listed U.S. patent documents are omitted because this application was filed after June 30, 2003 and is, thus, subject to image file wrapper processing. Copies of listed foreign patent documents and non-patent literature are enclosed.							
		Copies of the documents listed on sheet(s) of Form PTO-1449 (or equivalent) are omitted because (1) they are already of record in U.S. Patent Application No, filed, on which this application relies for an earlier filing date under 35 U.S.C. § 120; and (2) any information disclosure statement filed in the prosecution of Application No, complies with 37 CFR §§ 1.98(a) through (c). (37 C.F.R. § 1.98(d))							
2.		The Examiner's attention is directed to the enclosed copy of copending U.S.  Patent Application No, filed, for, which is cited in this application.							
3.	This in	formation disclosure statement is being submitted (check box a., b., or c.):							
	a.	Within three months of the filing date of a national application or entry of the national stage in an international application; or before the mailing of a first Office action on the merits; or before the mailing of a first Office action after the filing of a request for continued examination under 37 CFR 1.114. (No statement under 37 CFR 1.97(e) is required.); or							

	b.		of eithe	he period set forth in paragraph 3a, but before the mailing date er a final action, a notice of allowance, or an action that ise closes prosecution in the application. (Check box i. or ii.)
		i.		A \$180.00 information disclosure statement submission fee set forth in 37 CFR 1.17(p) is enclosed, or
		ii.		A statement specified by 37 CFR 1.97(e) is set forth below; or
	c.		before 1.97(e)	he mailing date of a final action or notice of allowance and on or payment of the issue fee. A statement specified by 37 CFR is set forth below. Enclosed is a \$180.00 information ture statement processing fee set forth in 37 CFR 1.17(p).
4.			specifie states th	ed by 37 CFR 1.97(e) is required, the attorney or agent signing nat:
		was fir counte	st cited rpart for	information contained in the information disclosure statement in any communication from a foreign patent office in a reign application not more than three months prior to the filing tion disclosure statement; or
		cited in applica making inform 37 CFI	n a com ation, ar g reason ation di	ormation contained in the information disclosure statement was munication from a foreign patent office in a counterpart foreign ad, to the knowledge of the person signing the certification after table inquiry, no item of information contained in the sclosure statement was known to any individual designated in c) more than three months prior to the filing of the information ement.
5.				lanation of the relevance of each document not in the English or selected documents in the English language is set forth below.
				Respectfully submitted,
				Planar Systems, Inc.
				By Massim M. Ferris Registration No. 39,974

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Portland, OR 97204-1268
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Attorney Docket No. 11429/13:3

Substitute for form

PTO/SB/08a (05-03)
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INFORMATION DISCLOS STATEMENT BY APPECA Application Number 10/609,339 Filing Date June 26, 2003 First Named Inventor Jarmo Ilmari Maula Art Unit

(Use as many sheets as necessary)

Sheet 1

Attorney Docket Number |11429/13:3

Examiner Name

			U.S. PATENT	DOCUMENTS	
Examiner Initials*	Cite No. <sup>1</sup>	Document Number  Number-Kind Code <sup>2 (1 known)</sup>	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1	<sup>US-</sup> 3,606,241	09/20/1971	Bornholdt	
	2	US- 4,437,488	03/20/1984	Taggart et al.	
**********	3	<sup>US-</sup> 4,582,294	04/15/1986	Fargo	
	4	US- 4,903,938	02/27/1990	Nishizawa et al.	**************************************
	5	US- 4,944,487	07/31/1990	Holtermann	
wa	6	US- 5,188,337	02/23/1993	Mertens et al.	
	7	US- 5,282,604	02/01/1994	Wade	
	8	US- 5,326,078	07/05/1994	Kimura	
*	9	US- 5,375,738	12/27/1994	Walsh et al.	
	10	US- 5,413,311	05/09/1995	Arstein et al.	
	11	US- 5,624,102	04/29/1997	Nishimura et al.	
	12	<sup>US-</sup> 5,669,596	09/23/1997	Yoshikawa et al.	
	13	US- 5,743,513	04/28/1998	Yoshikawa et al.	
***************************************	14	US- 5,755,428	05/26/1998	Ollivier	
	15	US- 5,820,105	10/13/1998	Yamaji et al.	
	16	US- 5,865,421	02/02/1999	Ono	
	17	<sup>US-</sup> 5,881,997	03/16/1999	Ogawa et al.	
Annual and the second s	18	US- 6,007,046	12/28/1999	Rothermel	-

	FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No.1	Foreign Patent Document  Country Code <sup>3</sup> Number <sup>4</sup> 'Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>	
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Examiner	Date	
Signature	Considered	

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Translation is attached.
This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Sheet 2

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Substitute for form 1449A/PTO	to respond to a collection of information unless it contains a valid OMB control number.  Complete if Known			
	Application Number	10/609,339		
INFORMATION DISCLOSURE	Filing Date	June 26, 2003		
STATEMENT BY APPLICANT	First Named Inventor	Jarmo Ilmari Maula		
STATEMENT BY ALL LIGANT	Art Unit			
(Use as many sheets as necessary)	Examiner Name			
et 2 of 3	Attorney Docket Number	11429/13:3		

Examiner Initials*	Cite No.1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant
		Number-Kind Code <sup>2 (* known)</sup>		· ·	Figures Appear
	19	<sup>US-</sup> 6,092,550	07/25/2000	Götch et al.	
	20	<sup>US-</sup> 6,116,267	09/12/2000	Suzuki et al.	
adamas subreresan diviniquent Pe	21	<sup>US-</sup> 6,202,672 B1	03/20/2001	Ellis et al.	
	22	US- 6,394,415 B1	05/28/2002	Ohmi et al.	
	23	<sup>US-</sup> 6,508,453 B2	01/21/2003	Mamyo	
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	FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No.1	Foreign Patent Document  Country Code <sup>3</sup> Number <sup>4</sup> 'Kind Code <sup>5</sup> ( <i>f known</i> )	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>	
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Complete if Known **Application Number** 10/609,339 Filing Date June 26, 2003 First Named Inventor Jarmo Ilmari Maula Art Unit **Examiner Name** 

Sheet Attorney Docket Number 11429/13:3 3

NON PATENT LITERATURE DOCUMENTS					
Examiner   Cite   No.1		magazing journal social symposium catalog etc.) data page(s) volume-issue number(s) publisher city			
	24	Detroit Coil Co., "What Is a Solenoid?", http://www.detroitcoil.com/whatis.htm, visited 5/19/03, 10 pages.			
	25	Fujikin, Inc., Straight Diaphragm Valve specification sheet, http://www.fujikin.com.jp/topics/topics2_e.htm, visited 5/20/03, 3 pages.			
	26	Fujikin, Inc., MEGA-ONE LA Direct Diaphragm Valve with Pneumatic Cylinder, http://www.fujikin.co.jp/prodinf/en/pure/mega/la.html, visited 5/20/03, 5 pages.			
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Examiner	Date	
Signature	Considered	

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